City of Beaverton
2014 Water Quality Report
(Monitoring Data From 2013)

The City of Beaverton is pleased to present you with this 2014 Water Quality Report, now available online.

The 2014 City of Beaverton Water Quality Report, also known as the Consumer Confidence Report (CCR), is now available online at www.BeavertonOregon.gov/CCR.

Using data collected in 2013, this report summarizes information about your water supply sources, the water system facilities that deliver water to your tap, and the quality of your drinking water. Also included is information about programs underway that are helping to ensure that you have safe and dependable drinking water.

The City of Beaverton is proud of the high quality of our water supply, which meets or exceeds state and federal water quality requirements. If you have any questions regarding your water quality or about information presented in this report, please call us at 503-350-4017.

The purpose of the report is:

To provide you with information about your drinking water and comply with the reporting requirements of the U.S. Environmental Protection Agency (EPA), Consumer Confidence Report Rule, 40 CFR, Part 141, Subpart O.

Paper copies of the Water Quality Report are available at City Hall, City libraries (main branch and Murray Scholls), and the Operations Center. If you would like a copy of the report mailed to you, call Glen Dorsey at 503-350-4059. For translation services or to speak with someone about the report, call the Water Quality Report Hotline at 503-350-4017.

Information in this report is available upon request in alternative formats by calling the City of Beaverton's Water Quality Report Hotline at 503-350-4017.

Si Habla Español: Este informe contiene información muy importante. Tradúscalo ó hable con un amigo quien lo entienda bien.

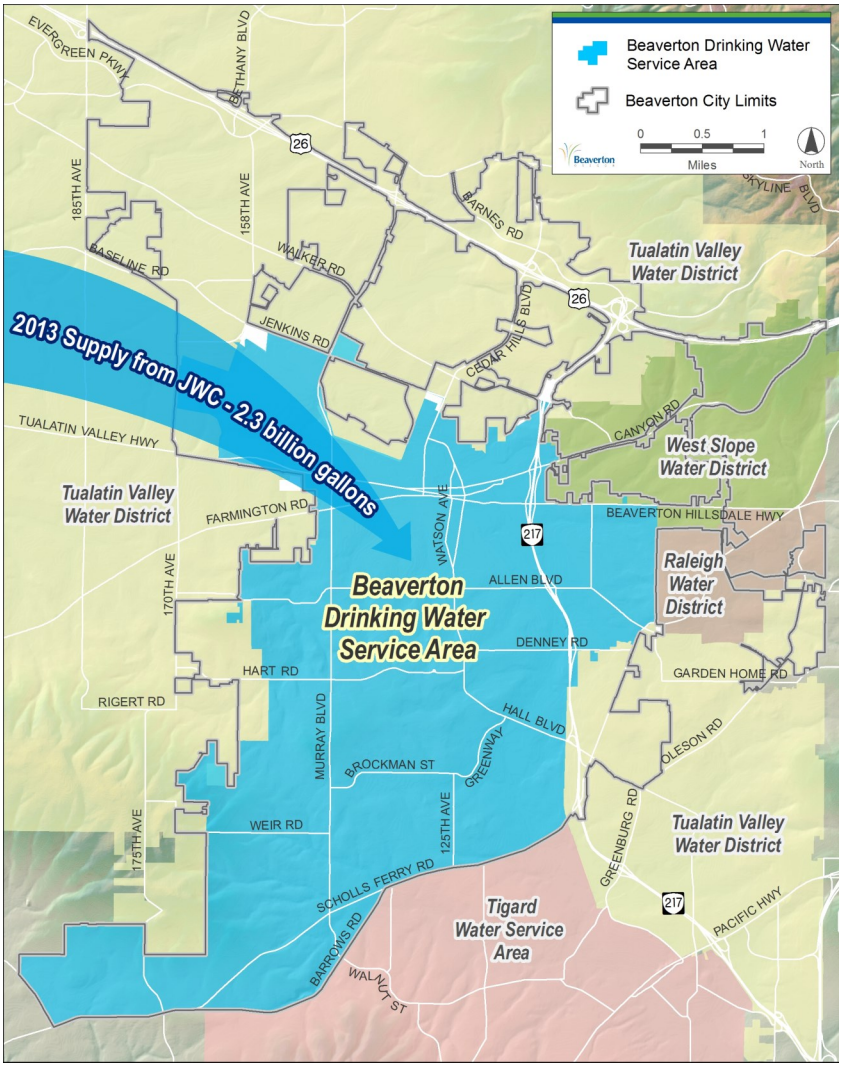
Beaverton
OREGON

Your Water is Our First Priority

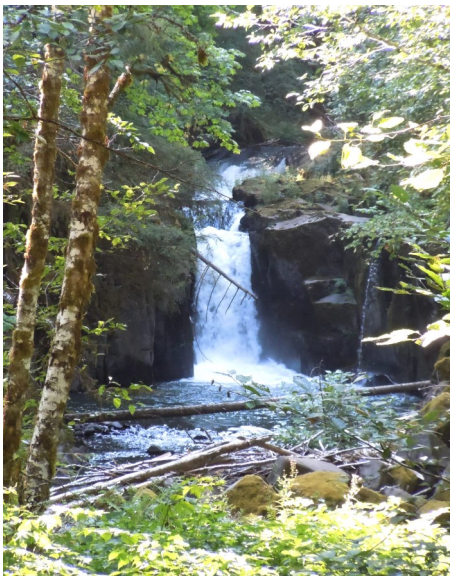
Your City Water System at a Glance

Following are facts about the City's water system:

- The distribution system includes five local water storage reservoirs, with a combined total storage volume of 28.25 million gallons (MG).
- The City owns additional reservoir storage of 10 MG near the Joint Water Commission (JWC) water treatment plant.
- The distribution system (separate from the JWC supply system) consists of approximately 284 miles of pipe, ranging from 4 to 36 inches in diameter.
- In 2013, the City consumed an average of 6.85 million gallons per day (mgd) or a total of 2.5 billion gallons of water for the year. On August 2, 2013, the City consumed 12.14 MG of drinking water, the highest demand day.
- The City has a 4-day supply of stored drinking water in its local reservoirs.
- The distribution system contains four pumping stations that lift water from the largest water service pressure zone on the valley floor through pipes to the nine other higher-elevation water pressure zones within the City's water service area.
- The City's owned capacity in the JWC treatment plant is 18.75 mgd.
- The City has an additional water supply of 5 mgd available from Aquifer Storage and Recovery (ASR) wells, commonly used only in the summer.
- In addition to the JWC and ASR wells, there is an emergency supply capacity of 8 mgd available from two adjoining public water providers (Tualatin Valley Water District and City of Portland).



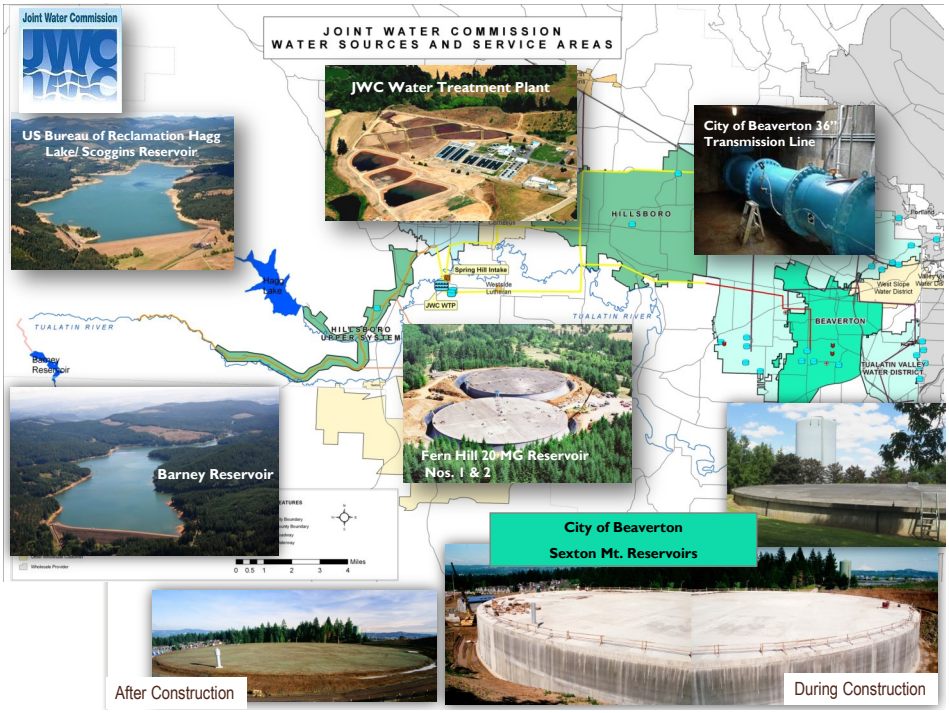
Sexton Mountain Steel Standpipe and 5 MG Concrete Reservoir



Tualatin River at Lower Haines Falls

Beaverton's Drinking Water Sources

The primary source of filtered drinking water in Beaverton's service area is the JWC water treatment plant located south of Forest Grove. The JWC treatment plant filters surface water pumped from the nearby upper Tualatin River. The JWC treatment plant can produce up to 75 mgd of finished drinking water. The City owns a 25 percent share in the JWC treatment plant, allowing the City up to 18.75 mgd of treated water. During 2013, a total of 2.3 billion gallons of drinking water was transported by pipeline approximately 20 miles from the JWC treatment plant to the City's in-town storage reservoirs and into the pipes in the City streets for distribution to water consumers. Drinking water travels through approximately 284 miles of in-town water mains in the City's distribution piping system to water consumers. There are approximately 18,000 water meters that measure water delivered to City water customers. The City provides drinking water to approximately 69,000 of the City's total population of 92,000. Three other water districts (Tualatin Valley Water [TVWD] District, West Slope Water District, and Raleigh Water District) serve the remaining 23,000 residents within the City limits.



The City is a member of the JWC, which is an intergovernmental water supply agency whose owner-members include the Cities of Beaverton, Hillsboro, and Forest Grove, and the TVWD. The JWC was formed to store, manage, treat, and convey drinking water for each JWC member, and supplies water to more than 400,000 people.

Tualatin River at Upper Haines Falls

During the summer, when drinking water demand is high and Tualatin River streamflow is low, water is released from Hagg Lake (Scoggins Reservoir) and Barney Reservoir (formed behind a dam on the Trask River in the Coast Range) to compensate for the amount removed for Beaverton's summer use. Water released from Barney Reservoir is diverted by pipes from the Trask River basin into the upper Tualatin River.

JWC Water Treatment Plant on Fern Hill Road

The City owns the right to use up to 1.3 billion gallons (4,000 acre-feet) in Scoggins Reservoir and 1.4 billion gallons (4,300 acre-feet) in Barney Reservoir. Water originating from these two reservoirs is the source of most of the City's raw water (before treatment) during the summer. Release of stored raw water from the two reservoirs increases summertime streamflow in the Tualatin River, helping to sustain a healthy river ecosystem. Every winter and spring, the City uses up to its 16 mgd natural streamflow water right to meet daily water supply demands. Surface water from the Tualatin River then is filtered in the JWC treatment plant before delivery to the City.

Scoggins Dam and Hagg Lake Update

Scoggins Dam

Construction of the Tualatin Project was authorized by the Congress with the Act of September 20, 1966. Since 1973, when the U.S. Bureau of Reclamation (Reclamation) was completing Scoggins Dam, the City of Beaverton has been a direct municipal "repayment contractor" to Reclamation for use of up to 4,000 acre-feet of water annually. Beaverton has two current contracts with Reclamation dating back to 1971.

Scoggins Dam/Hagg Lake is currently Beaverton's and Washington County's primary source of water in the summer and a central component to our region's water supply. Hagg Lake supports nearly 250,000 jobs, provides drinking water for more than 400,000 residents, irrigates 17,000 acres of cropland, provides important flood control and recreation opportunities, and sustains water quality in the Tualatin River to protect fish and wildlife habitat.

Hagg Lake, viewed from Scoggins Dam

The City of Beaverton received a letter from Reclamation dated October 20, 2011, which stated that: "Scoggins Dam could lose freeboard due to large deformations and fail from overtopping during a seismic event. Scoggins Dam could fail from erosion through cracking during a seismic event. The spillway walls at Scoggins Dam could fail during a seismic event leading to failure of the dam. Failure would result in the loss of lives and property downstream and the loss of project benefits for years to come. The seismic hazard at Scoggins Dam is among the most severe earthquake loadings within Reclamation's inventory of dams, largely due to the proximity to the Cascadia Subduction Zone. Assuring the safety of Scoggins Dam is a key element that Reclamation continues to deliver the authorized benefits of the project."

Reclamation has spent the last three years developing and refining alternatives, with scopes and cost estimates to complete a seismic retrofit of the Scoggins Dam in a Corrective Action Study under Reclamation's Safety of Dams Program. Reclamation's last estimates for structural modifications of the existing dam are $300 to $500 million. Given federal budget constraints, a key concern is that Reclamation could lower levels in Hagg Lake to reduce risk, which would be detrimental to the future growth plans of Washington County and the local partners. At the same time, the JWC partners – Beaverton, Hillsboro, Forest Grove and the TVWD - continue to support Reclamation's work to secure Scoggins Dam to reduce the risk of failure in a major earthquake in order to protect public safety, secure our region's water supply, and help meet future needs. The exact date of the Scoggins Dam seismic retrofit construction is difficult to predict, but it is likely 5 to 10 years ahead.

Willamette Water Supply System—A New Water Supply Opportunity

Due in part by the uncertain schedule for funding and seismic modification of Scoggins Dam (see article above), the City of Hillsboro and the Tualatin Valley Water District made the decision to secure the long-term drinking water needs from the mid-Willamette River, at Wilsonville.

Existing Willamette River Water Treatment Plant

In February 2013, the City of Hillsboro formally designated the Willamette River as its long-range water supply source. Tualatin Valley Water District (TVWD) and the City of Hillsboro are partnering to develop the mid-Willamette River as their next water supply source. The mid-Willamette River at Wilsonville offers significant benefits: excellent water quality, redundancy, local ownership and control of the supply, year-round reliability, and lower cost than other options considered. The new drinking water source is expected to be

Willamette Water Supply System (cont'd)

operational by 2026. Beaverton and other water providers in the region are now looking at their options for future participation in the mid-Willamette River source. Developing an additional water supply through a partnership supports the region's plans for responsible growth within urban growth boundaries.

In September 2013, the Beaverton City Council authorized an expenditure of $100,000 to fund participation in the Willamette Water Supply Preliminary Design, undertaken by TVWD and Hillsboro. The work includes evaluation of a new water pipeline and storage facilities for the Willamette River water source.

Over the coming year, the City of Beaverton will decide whether to join the program as a financial partner. If Beaverton joins with TVWD and Hillsboro, the City would secure enough future water supply to supplement the existing capacity Beaverton owns in the Tualatin River source to provide permanent water supply diversity. The mid-Willamette River would also provide drinking water to meet Beaverton's planned growth and provide a reliable additional source in case of drought, if the Tualatin River were contaminated or rendered unusable, or if Scoggins Dam becomes unavailable as a summer water source. Also, the mid-Willamette River would provide for a long-term supply option, as the City's existing surface water right of 16 million gallons per day on the Tualatin River is not predicted to provide enough wintertime capacity beyond the year 2045.

The Willamette River is a proven, abundant and reliable water source. The City of Wilsonville has been providing satisfied residents and businesses with treated and filtered water from the Willamette River for more than 12 years. The City of Sherwood now also draws on the mid-Willamette as a drinking water source. More details on the Willamette Water Supply Program can be found at: www.ourreliablewater.org

Photos show the existing Willamette River Water Treatment Plant from which the City's of Wilsonville and Sherwood obtain their drinking water

City of Beaverton ASR – Aquifer Storage and Recovery

During the winter and spring, when Tualatin River flow is plentiful, the City of Beaverton uses ASR wells to transfer treated drinking water from the JWC water treatment plant into natural underground basalt formations (aquifer), displacing native groundwater.

Since 1998, the City has allocated considerable funding to develop ASR. ASR Well No. 2, completed in 2001, and located at the Sorrento Water Works Facility, produces up to 2 mgd. The current estimated single-day summertime peak demand for the City is almost 17 million gallons. The completion of ASR Well No. 4 in 2007 added 3 mgd more in ASR production. The current total peak pumping capacity of ASR Well Nos. 2 and 4 is 5 mgd, with an underground storage capacity of about 450 MG.

ASR No. 4 Pump house, fully operational

Inside ASR No. 4 Pump House

From 1999 to date, the City has pumped out more than 3.57 billion gallons of potable water stored in the three ASR wells to help meet peak summer season water demand. In 2013, 221 MG of stored water and native groundwater were recovered (pumped into the water system) from the ASR wells to help meet summer customer drinking water consumption.

ASR Well No. 1, originally constructed as a conventional groundwater well in 1945, was refitted for ASR use in 1997, having a peak pumping capacity of 1 mgd. ASR Well No. 1 reached the end of its useful life three years ago and is now out of service.

ASR No. 5 is proposed to replace and offset the loss in ASR capacity of existing ASR No. 1, and add new pumping capacity of an additional 1 mgd of potable water. The proposed project, ASR No. 5 well and pumping station, is expected to have a total peak-capacity of 2 mgd. Construction of ASR Well No. 5 is planned over the next 3 to 5 years at the existing Sorrento Reservoir and Pump Station site owned by the City of Beaverton.

ASR pumping capacity, using ASR Well No. 5, will increase the reliability and capacity of supply both for the City of Beaverton, and indirectly, for all JWC partners. An increase in 2 mgd during average peak season water demand will provide for an equivalent supply of potable water to approximately 15,800 new Beaverton residents (calculated using current average-day per capita water use) as Beaverton's population grows. In the next 15 years, it is anticipated that the additional capacity afforded by the ASR project will meet three key regional needs:

- Meeting short-term projected supply deficiencies to support City growth.
- Providing alternate supply during seismic upgrades to Scoggins Dam.
- Increasing reliability during drought or emergency situations.

City of Beaverton ASR – Aquifer Storage and Recovery (cont'd)

With the significant seismic risks concerning Scoggins Dam, and Reclamation's uncertain schedule to modify or replace Scoggins Dam, the expanded use of ASR by Beaverton is an important bridge to conserve stored water in the event of a drought , imposed reservoir fill restriction(s), water quality problems, or other water-limiting events in the future. Construction of ASR Well No. 5 is a priority to replace ASR Well No. 1.

ASR No. 2 Pump house, fully operational

ASR No. 1 Pump House, Out-of-Service. Will be replaced with proposed ASR No. 5

Cross Connection Control Program

As a City customer, you expect your drinking water to be safe. We are committed to providing you the healthiest, highest quality water, but we need your help. The City has a cross connection control program, as required by the Oregon Health Authority (Drinking Water Services) and the Environmental Protection Agency (EPA.)

Weed killers, pesticides, or fertilizers back-siphoned through sprinkler heads or from the ground (saturated by irrigation water) can contaminate water inside irrigation pipes. Without a backflow prevention assembly, a cross connection between plumbing containing a harmful substance and a drinking water pipe could allow backflow of the harmful substance into your household plumbing or a public drinking water distribution main, where it could be consumed accidentally by you or other City water users. Protection of residential water systems can be accomplished by using a special backflow prevention valve (assembly or device) to prevent potential risk of contamination to the public supply as required by Oregon law.

Backflow assembly

Fortunately, there are many things you can do to help prevent contamination of the public water system, and your household plumbing, caused by backflow.

Irrigation systems: Ensure an approved backflow assembly is installed, is in good working condition, and is tested annually.

Swimming pools and hot tubs: Ensure that if a water hose is used to fill these units, it is protected with a hose bib vacuum breaker installed on the faucet.

Residential boilers: Ensure an approved backflow assembly is installed, is in good working condition, and is tested annually.

Private wells: Ensure that a well system is not connected to a public water system. If it is connected, it must have a backflow assembly at the meter, be in good working condition, and be tested annually.

The Oregon Administrative Rules Chapter 333-61-070 regulates that a water purveyor shall (1) carry out a cross connection control inspection program, (2) discontinue water service to premises that fail to install an approved backflow assembly where a cross connection or potential cross connection may exist, and (3) ensure the required backflow assembly is tested on an annual basis by a certified testing company and to be paid for by the homeowner. For assistance or advice in choosing a backflow assembly or if you are not sure which water provider serves you, please contact the City of Beaverton, Cross Connection Control Specialist, at 503-526-2220.

City of Beaverton 2014 Water Quality Data (Monitoring Data from 2013)

Major Sources of Water: Joint Water Commission Water Treatment Plant, and Aquifer Storage and Recovery Wells

Regulated Substances

	Unit of Measure	Federal/State Water Quality Standard/Goal	Range	Amount Detected	Regulatory Exceedance	Major Sources in Drinking Water
Inorganic Substances						
Barium	ppm	2 (MCL)	ND to 0.003	0.003	No	Erosion of natural deposits and discharge from metal refineries
Chromium	ppb	100 (MCL)	ND to 0.51	0.51	No	Erosion of natural deposits and discharge from steel and pulp mills
Fluoride (treatment plant and ASR wells)	ppm	4 (MCL)	ND to 0.56	0.56	No	Erosion of natural deposits, water additive, and fertilizers
Fluoride (City meter)	ppm	4 (MCL)	0.041 to 1.003	1.003	No	
Copper	ppm	1.3 (Action Level)	ND to 0.437	0.252 [a]	No	Erosion of natural deposits and corrosion of household plumbing
Lead	ppb	15 (Action Level)	ND to 10	7 [a]	No	
Nitrate	ppm	10 (MCL)	0.06 to 0.9	0.9	No	Erosion of natural deposits, runoff from fertilizer use, leaching from septic tanks, sewage
Nitrite	ppm	1 (MCL)	one detection	0.01	No	
Disinfection By-products and Residuals within the Distribution System						
Total Trihalomethanes	ppb	80 (MCL)	18.1 to 44.6	42.3 [b]	No	By-product of drinking water disinfection
Total Haloacetic Acids	ppb	60 (MCL)	11.5 to 42.2	33.7 [b]	No	
Chlorine	ppm	4 (MRDL)	0.457 to 0.697	0.647 [c]	No	Water additive used to control microbes
Treatment Considerations						
Total Organic Carbon	ppm	NA (TT)	ND to 1.72	1.72	No	Naturally present in the environment
Turbidity	NTU	NA (TT)	0.02 to 0.05	0.04	No	Soil Runoff
100% of samples were below the limit set for the treatment plant						
Radiological Substances - ASR Wells Only						
Alpha Emitters	pCi/L	15 (MCL)	one detection	3.5	No	Erosion of natural deposits
Combined Radium	pCi/L	5 (MCL)	one detection	0.8	No	

Footnotes

[a] **Lead and Copper**: the value shown is the 90th per-centile result of samples collected in 2013.

[b] Total trihalomethanes and total haloacetic acids are monitored at eight locations within the distribution system. Locational running annual averages (LRAAs) are calculated quarterly at each location, and the value shown iare the range and the highest LRAA detected.

[c] The value shown is the maximum quarterly running annual average of samples collected in 2013.

Definitions

Maximum Contaminant Level Goal (MCLG): The level of a contaminant in drinking water below which there is no known or expected risk to health. MCLGs allow for a margin of safety.

Maximum Contaminant Level (MCL): The highest level of a contaminant that is allowed in drinking water. MCLs are set as close to the MCLGs as feasible using the best available treatment technology.

Action Level: The concentration of a contaminant which, if exceeded, triggers treatment or other requirements which a water system must follow.

Treatment Technique (TT): A required process intended to reduce the level of a contaminant in drinking water.

Maximum Residual Disinfectant Level (MRDL): The highest level of a disinfectant allowed in drinking water. There is convincing evidence that addition of a disinfectant is necessary for control of microbial contaminants.

Secondary MCL (SMCL): National Secondary Drinking Water Regulations (NSDWR or secondary standards) are nonenforceable guidelines regulating contaminants that may cause cosmetic effects (such as skin or tooth discoloration) or aesthetic effects (such as taste or color) in drinking water. EPA recommends secondary standards to water systems, but does not require systems to comply. However, states may choose to adopt them as enforceable standards.

Unregulated Substances

	Unit of Measure	Federal/State Water Quality Standard/Goal	Range	Amount Detected	Regulatory Exceedance	Major Sources in Drinking Water
Unregulated Contaminant Monitoring Rule (UCMR)						
Vanadium	ppb	NA	0.36 to 13.5	13.5	No	Erosion of natural deposits and discharge from metal refineries
Strontium	ppb	NA	29.9 to 50.3	50.3	No	Erosion of natural deposits, coal combustion, milling processes, and fertilizers
Hexavalent Chromium	ppb	NA	0.111 to 0.824	0.824	No	Erosion of natural deposits, discharge from metal refineries and other industrial processes
Other Unregulated Substances						
Radon	pCi/L	NA	511 to 662	662	No	Erosion of natural deposits
Sodium	ppm	20 (Advisory Level)	8.3 to 13.1	13.1	No	Erosion of natural deposits and treatment additive
Chloride	ppm	250 (SMCL)	4.3 to 21	21	No	
Aluminum	ppb	50 to 200 (SMCL)	ND to 10	10	No	Erosion of natural deposits
Iron	ppb	300 (SMCL)	ND to 124	124	No	
Sulfate	ppm	250 (SMCL)	ND to 10	10	No	
Total Dissolved Solids	ppm	500 (SMCL)	63 to 170	170	No	Naturally occurring in water - depends on dissolved contituents

Definitions (cont'd)

Advisory Level for Sodium: Sodium is included on EPA's list of contaminants that may require future regulation under the Safe Drinking Water Act. The advisory is based on aesthetic effects (taste) and is intended as a guideline for water providers.

NA: Not applicable

ND: Not detected

NTU: Nephelometric turbidity unit (measurement of cloudiness in water)

Part per Billion (ppb): One part substance per billion parts water (or microgram of substance per liter of water)

Part per Million (ppm): One part substance per million parts water (or milligram of substance per liter of water)

Picocurie per Liter (pCi/L): A unit of measure for the concentration of radiological substances in water

Turbidity: Turbidity is a measure of the cloudiness of the water. It is monitored because it is a good indicator of the effectiveness of the water treatment plant filtration system.

Lead: If present, elevated levels of lead can cause serious health problems, especially for pregnant women and young children. Lead in drinking water is primarily from materials and components associated with service lines and home plumbing. The City of Beaverton is responsible for providing high quality drinking water, but cannot control the variety of materials used in plumbing components. When your water has been sitting for several hours, you can minimize the potential for lead exposure by flushing your tap for 30 seconds to 2 minutes before using water for drinking or cooking. If you are concerned about lead in your water, consider having your water tested. Information on lead in drinking water, testing methods, and steps you can take to minimize exposure is available from the Safe Drinking Water Hotline or at http://www.epa.gov/safewater/lead.

Radon: is a radioactive gas that you cannot see, taste, or smell. It is found throughout the United States. Radon can move up through the ground and into a home through cracks and holes in the foundation. Radon can build up to high levels in all types of homes. Radon also can get into indoor air when released from tap water from showering, washing dishes, and other household activities. Compared to radon entering the home through soil, radon entering the home through tap water in most cases will be a small source of radon in indoor air. Radon is a known human carcinogen. Breathing air containing radon can lead to lung cancer. Drinking water containing radon also may cause increased risk of stomach cancer. If you are concerned about radon in your home, test the air in your home. Testing is inexpensive and easy. Fix your home if the level of radon in your air is 4 picocuries per liter of air (pCi/l) or higher. There are simple ways to fix a radon problem that are not too costly. For additional information, contact Oregon Health Authority's radon program at 971-673-0440 or visit the Web site at www.healthoregon.org/radon, or call EPA's Radon Hotline (800-SOS-RADON).

Unregulated Contaminant Monitoring Rule (UCMR): The purpose of EPA's Unregulated Contaminant Monitoring Rule (UCMR) is to collect nationwide data to help EPA to evaluate the occurrence of, and form regulatory decisions about, certain unregulated contaminants in drinking water. While federal guidelines have not been established for these substances, states may choose to establish their own guidelines. For example, the state of California has proposed a state-specific drinking water standard of 10 ppb for hexavalent chromium, which may be adopted in 2014.

Regional Water Providers Consortium

The RWPC is a group of 22 local water providers plus the regional government Metro. For more information and resources to help conserve water at your home or business, please visit the Consortium Web site at www.ConserveH20.org for more information and resources to help conserve water at your home or business.

Indoor Water Conservation Tips

Here are 10 ways to help you start saving water indoors today:

1. Replace older toilets with a WaterSense labeled high-efficiency toilet. Older toilets can use up to 4 times more water per flush.
2. Regularly check for and repair water leaks. Even small leaks can waste hundreds to thousands of gallons of water a month. Many water leaks can be fixed by a do-it-yourself plumber, and repair parts are relatively inexpensive to purchase ($5 to $20).
3. Take shorter showers. Each minute you shave off your shower time saves up to 2.5 gallons of water.
4. Install an aerator on your bathroom or kitchen faucet and save about 1 gallon per minute. An aerator reduces the flow from the faucet, and uses air to maintain good water pressure.
5. Select an Energy Star-approved clothes washer next time you purchase a new washer. These washers use 15-20 fewer gallons of water per load, and you will see savings on your energy costs too.
6. Install a high-efficiency showerhead, and you could save an about 1 gallon of water per minute.
7. Know where your master shutoff valve is located. This could save water and prevent damage to your home.
8. Wash only full loads. Dishwashers use about the same amount of energy and water regardless of the number of dishes inside, so run full loads whenever possible.
9. Turn the sink faucet on only to rinse or use a large container filled with rinse water when washing dishes by hand. You will save about 2.5 gallons of water for every minute your faucet does not run.
10. Scrape instead of pre-rinsing. Save yourself up to 20 gallons of water by scraping food off your dishes instead of pre-rinsing them. Energy Star-qualified dishwashers and today's detergents are designed to do the cleaning so you don't have to. If your dirty dishes sit overnight, use your dishwasher's rinse feature. It uses a fraction of the water compared to hand rinsing.

"WaterSense" Rebate Program

The City's Water Conservation Program now offers rebates toward the purchase of new high efficiency toilets (HET) and water-efficient clothes washers. This residential pilot program gives City water customers an opportunity to conserve water and energy by replacing older, inefficient toilets and washers. "We're striving to improve sustainability in the community through partnerships and incentives that will make it easier for residents to make their homes more water and energy efficient," said Mayor Denny Doyle. "Together, we can continue to improve upon the great quality of life we enjoy in Beaverton."

WaterSense® TOILET REBATE PROGRAM

To receive rebates, applicants must have a current Beaverton water account, meet program eligibility requirements, and complete and submit an application for the rebate(s). In addition, customers must recycle old toilets to receive the HET rebate. Information about the rebate program, eligibility requirements, and a downloadable application can be found on the City's Web site.

http://www.beavertonoregon.gov/index.aspx?nid=346

For additional questions, contact Glen Dorsey at 503-350-4059 or email gdorsey@beavertonoregon.gov.

Outdoor Water Conservation Tips

During the warm summer months, we in the Portland metro area spend time outdoors tending to our lawns, growing our gardens, washing our cars — all activities that depend on water. As a result, water usage can double or triple.

Here are 10 ways to curb your water use while still maintaining a green and vibrant landscape:

1. Adjust your sprinklers so that they are watering your lawn and garden, and not the street or sidewalk.

2. Water early in the morning (before 10 a.m.) or later in the evening (after 6 p.m.) when temperatures are cooler and evaporation is minimized.

3. Set it, but don't forget it! Whether you have a manual or automatic system, be sure to adjust your watering schedules throughout the irrigation season.

4. Water established lawns about 1 inch per week (a bit more during hot, dry weather). Find out how much to water this week with the Weekly Watering Number, at www.ConserveH20.org.

5. Inspect your overall irrigation system for leaks, broken lines or blockage in the lines. A well-maintained system will save you money, water, and time.

6. Consider replacing some turf area with low-water-use plants and ornamental grasses. They are easier to maintain than turf, look beautiful, and require far less water.

7. Group plants with like watering needs. Creating "watering zones" in your garden will allow you to give each plant the water it requires — not too much or too little.

8. Add a shut-off nozzle to your garden hose and save about 5 to 7 gallons each minute your hose is on.

9. Adjust your mower to a higher setting. A taller lawn provides shade to the roots and helps retain soil moisture, so your lawn requires less water.

10. Apply the amount of water your soil can absorb. Water thoroughly, but infrequently. If runoff or puddling occurs, break longer watering sessions into several short sessions allowing water to soak into the soil between each session.

Get your FREE watering gauge today!

Contact Glen Dorsey at 503-350-4059 (gdorsey@beavertonoregon.gov) for a free watering gauge.

Using Your Water Meter to Test for Leaks

Undetected leaks can be costly. Fortunately, your water meter can help you detect leaks.

How to locate your meter
Your water meter is probably located in front of your house, inside a concrete or plastic meter box that is set flush with the ground. Look for your meter behind the sidewalk at a side lot line near the street. If your home is on a corner lot, your water meter could be located either on the front or side street. Sometimes, meter boxes are not easily visible because of landscaping and other obstructions.

How to read your meter
Reading your water meter is like reading the odometer in your car. Read all the numbers from left to right that appear under the words "cubic feet."

The first digit on the right represents 1 cubic foot. The second from the right represents 10 cubic feet. The third from the right (usually a different color) represents 100 cubic feet, or 1 ccf. One revolution of the meter sweep-hand equals 1 cubic foot, or 7.48 gallons.

How to use your meter to test for leaks
To use your meter to test for leaks, turn off all faucets and water-using appliances (such as dish and clothes washers) and be sure no one in the household is using any water. Then go to your water meter and lift the cover of the meter dial. Note the position of the sweep-hand, or use a marker on the lens cover. If you have a typical water meter, there should be no movement of the dials on the meter.

Wait 20 to 30 minutes and check the sweep-hand location again. If the sweep-hand has moved, you probably have a leak somewhere in your system. If the small red diamond-shaped indicator on the face of the meter is moving, it also means you probably have a leak. Retest to be certain.

Locate the leak by inspecting all the pipes, fixtures, and appliances that use water.

Important Information about Water and Your Health

Some people may be more vulnerable to contaminants in drinking water than the general population.

Immune-compromised people, such as those with cancer undergoing chemotherapy, those who have undergone organ transplants, people with HIV/AIDS or other immune system disorders, some elderly, and infants, can be particularly at risk from infections. These people should seek advice about drinking water from their health care providers.

The EPA's Center for Disease Control (CDC) guidelines on appropriate means to lessen the risk of infection by cryptosporidium and other microbial contaminants are available from the Safe Drinking Water Hotline (1-800-426-4791).

Drinking Water Fluoridation

The City fluoridates drinking water to improve the dental health for consumers of Beaverton's water. The City's fluoridation system was completed, tested, and began service in mid-May 2004 with a target fluoridation level of 0.9 parts per million (ppm). Based on EPA recommendations, the City reduced the target fluoride level from 0.9 to 0.7 ppm in 2011.

Sodium fluoride is added to Beaverton's drinking water after it leaves the JWC treatment plant and before entering the City for distribution. The City's fluoride facility employs sensitive instruments to measure and maintain the desired level of fluoride in the drinking water system. In addition, seven online electronic fluoride analyzers are situated in different locations throughout the City to monitor fluoride levels in the drinking water 24 hours a day.

Additional Water Quality Information

from the U.S. Environmental Protection Agency (EPA)

The sources of drinking water (both tap water and bottled water) include rivers, lakes, streams, ponds, reservoirs, springs, and wells. As water travels over the surface of the land or through the ground, it dissolves naturally occurring minerals and, in some cases, radioactive material, and can pick up substances resulting from the presence of animals or from human activity.

Contaminants that may be present in the water include:

- Microbial contaminants, such as cryptosporidium, viruses, and bacteria, which may come from sewage treatment plants, septic systems, agricultural livestock operations, and wildlife.
- Inorganic contaminants, such as salts and metals, which can be naturally occurring or result from urban stormwater runoff, industrial or domestic wastewater discharges, oil and gas production, mining, or farming.
- Pesticides and herbicides, which may come from a variety of sources, such as agriculture, urban stormwater runoff, and residential uses.
- Organic chemical contaminants, including synthetic and volatile organic chemicals, which are by-products of industrial processes and petroleum production, and also can come from gas stations, urban stormwater runoff, and septic systems.
- Radioactive contaminants, which can be naturally occurring or result from oil and gas production and mining activities.

To ensure that tap water is safe to drink, EPA prescribes regulations that limit the amount of certain contaminants in water provided by public water systems. The U.S. Food and Drug Administration (FDA) regulations establish limits for contaminants in bottled water to provide the same protection for public health.

A source water assessment completed by the Oregon Departments of Environmental Quality (DEQ) and Human Services (DHS) in 2003 is available at www.epa.gov

Water Quality Testing

The City is committed to providing safe drinking water to its water consumers. To ensure that the City's drinking water meets state and federal drinking water standards, the City collects an average of 140 water samples per month (1,680 samples per year) for testing by a State-certified laboratory. A table summarizing 2013 water quality data is provided in this report.

For a fee, private laboratories will test your tap water for lead and other substances. Not all laboratories are certified to test for all contaminants. For information regarding water quality testing, consult the Oregon Drinking Water Program's Web site. Download a list of all laboratories certified by the Oregon Health Authority at http://public.health.oregon.gov/LaboratoryServices/EnvironmentalLaboratoryAccreditation/Documents/acclab.pdf

You will need the FREE Adobe Acrobat Reader to view these files.

Safe Drinking Water Hotline

Drinking water, including bottled water, may reasonably be expected to contain at least small amounts of some contaminants. The presence of contaminants does not necessarily indicate that water poses a health risk. For more information about contaminants and potential health effects, call the the U.S. Environmental Protection Agency's (EPA) Safe Drinking Water Hotline at 1-800-426-4791.

City Water Projects

The City annually completes water capital improvement projects to expand, maintain, rehabilitate, and replace aging water system infrastructure. Following are highlights of three such projects aimed at helping to ensure continued delivery of high quality potable water.

SW Scholls Ferry Road Waterline Extension – (Roy Rogers Road to Loon Drive)

New 24-inch diameter waterline installed at the intersection of SW Scholls Ferry Road and SW Loon Drive

As part of Washington County's project to widen and improve Scholls Ferry Road, the City contracted to install approximately 2,100 lineal feet of new 24-inch diameter waterline and added two additional fire hydrants. The City intertied the new waterline to the City of Tigard's water system on Scholls Ferry Road to provide a connection that could be used in an emergency situation. This Beaverton water system expansion will serve a 544-acre undeveloped area that was annexed to the City in 2013.

Installation of a 24-inch diameter waterline at SW Scholls Ferry Road and SW 175th Ave

Sorrento Pump Station Upgrades

The City replaced older, inefficient pumps and motors with new higher-efficiency models. As part of the project, the City received a $27,000 grant from Energy Trust of Oregon to add variable-speed drives to reduce electrical energy used for pumping drinking water. The City estimates it will save approximately $4,000 per year in power costs.

New pumps and motors (in blue) at the Sorrento Pump Station

Sexton Standpipe Reservoir Maintenance

The Sexton Mountain 1.75 million MG steel standpipe reservoir was constructed in 1980, and was repainted in 1999. A 2013 consultant evaluation determined that the interior and exterior coatings on the standpipe reservoir had reached the end of their useful life. This project recoated both the interior and exterior of the reservoir, and also included cathodic protection improvements to mitigate against corrosion.

Above and Below: Standpipe reservoir before painting

Above and Below: Standpipe reservoir after painting

Tualatin River above Haines Falls, located approximately 4 miles downstream from the diversion point where Barney Reservoir water enters the upper Tualatin River. Please see the section titled "Beaverton's Drinking Water Sources" for more information on the role the Tualatin River plays in Beaverton's drinking water supply.

Beaverton
OREGON

Water Questions? We Have Answers!

Water Billing Question?
☎ Call 503-526-2257

Water Quality Question?
☎ Call 503-781-0704
🖱 bdolbow@beavertonoregon.gov

Water Conservation Question?
☎ Call 503-350-4059
🖱 gdorsey@beavertonoregon.gov

Backflow Prevention Question?
☎ Call 503-526-2278
🖱 aluciano@beavertonoregon.gov

Water Pressure Question?
☎ Call 503-816-0217
🖱 ttilander@beavertonoregon.gov

Future Water Sources Question?
☎ Call 503-526-2434
🖱 dwinship@beavertonoregon.gov

Water Emergency?
☎ Call 503-526-2220

After-hours Water Emergency?
☎ Call 503-526-2260